

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

6264

LIBRARY
RECEIVED
★ MAY 2, 1934 ★
U. S. Department of Agriculture

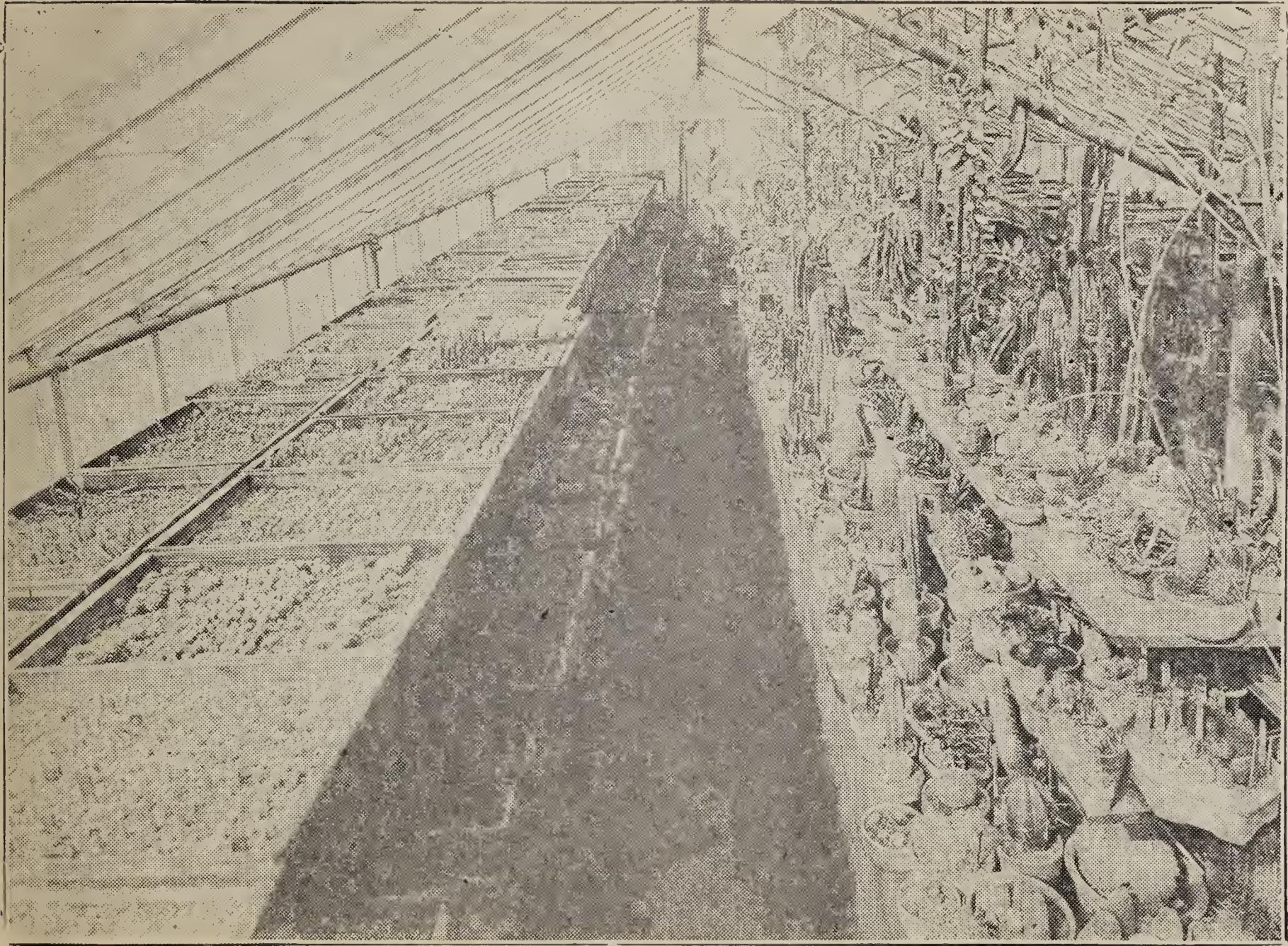
ILLUSTRATED CATALOG



1933-34

SHINER CACTUS NURSERY
P. O. BOX 2.
LAREDO, TEXAS.

BRANCH OF
SHINER SEED & PLANT CO.



**CATALOG
OF CACTI
and other
Succulents
ILLUSTRATING
UNUSUAL
SPECIES
OF THE TEXAS
MEXICAN BORDER
AND THE
WORLD'S
RAREST FROM
THE
WEST INDIES,
MEXICO,
CENTRAL
AMERICA,
SOUTH AMERICA
AND AFRICA.**

PRICE
25c Per COPY

VIEW OF ONE HALF CACTUS SEEDLING GREENHOUSE, 2202 MARKET ST.

SHINER CACTUS NURSERY

BRANCH OF
SHINERISEED & PLANT CO.

GREETING

Through this our Illustrated Catalog for the season 1933 - 1934, we again extend handclasp and greeting to our friends the rare plant lovers all over the world whose continued and growing interest and many requests have urged its publication. We have included all illustrations of 1932 - 33, have added as many new pictures as possible, more descriptive matter, also general instructions for the care and propagation of cacti and kindred plants.

Our efforts to enlarge and improve this catalog are in line with a plan of friendly service which we have tried to follow from the beginning. We are not in the rare plant business just for what quick money may be taken in. We are in it as students, sincerely interested in developing our nursery into a rare plant center which will be worthy of national recognition as a museum of worth while species. Our ambition is to create and encourage throughout the United States and the world still greater enthusiasm in the growing of these greatest of Nature's plant wonders.

A SUGGESTION—HAVE A CACTUS LIBRARY

We urge all who are interested in cacti and succulents to have a reference library on these subjects, keeping together in one place their catalogs, books, magazines, correspondence and especially a scrapbook—all handy for quick reference when needed. Save all cactus catalogs.

THE BLANC CUTS

The majority of our cuts, obtained from the late J. H. Callander of Peterborough, Ont., Can., are those which were used in "Hints on Cacti" the original A. Blanc catalog issued in 1890. A few of these are still in existence and are highly prized by their possessors. Another treasure among catalogs was issued by Mrs. Anna B. Nickels of Laredo, Texas, a few years later. Mrs. Nickels borrowed the Blanc cuts from Mr. Callander to illustrate her species. We have a copy, also the set of Callander issues during the 1890's and early 1900's.

The Blanc cuts are thrilling to botany students and plant lovers when it is understood that often times the final drawings for them were made in far off Germany from only word descriptions and rough sketches sent there by the early North and South American plant discoverers. These noted men pioneered as truly in this field of work as did the early settlers in theirs, and accounts of their expeditions have made plant history.

In several instances for the interesting comparison we have pictured a species both by the Blanc cut and by modern photography.

OUR NURSERY

Our nursery, now in its sixth year, has grown by continued exchange, purchase and propagation until we understand that it is the largest cactus nursery in the United States. In building up our stock and collection we have followed a definite program which included—first the gathering together of the most noteworthy of the available species in the United States, and second—the starting from seeds of hundreds of the wanted plant rarities from the almost inaccessible mountains and deserts of the South American countries, Mexico and other lands.

Because of United States government plant restrictions many collections would be limited to only U. S. native species if it were not for the propagation of rare foreign species from seed.

OUR PLANTS

Cacti and other succulents, because of their odd forms, interesting histories and atmosphere of romantic far away countries, are becoming more and more popular among plant lovers and connoisseurs of the rare in plant life.

The infinitely varied forms of the plants themselves, the novel ways in which they may be planted and the comparatively little care which they require, make them ideal as selections for decorative pots, combination bowls or miniature desert dish gardens.

Along the Pacific coast and across the Southern states they are used most successfully in all year rock gardens and display beds. In colder sections they may be used in summer rock gardens as suggested on Page 9, with indoor care for the coldest months.

SEEDS

A price list of fresh seeds, gathered from our own plants or imported from foreign countries, will be sent on request. Instructions for propagation accompany seed orders.

ASSURANCE

We wish to assure our customers that they will not find our native species for sale in the 10 cent stores if it is within our power to prevent it. Thinking people cannot approve of the wholesale slaughter of our beautiful native species which follows their methods of gathering and marketing.

APPRECIATION

Our list of friends, who have helped in issuing this catalog by sending pictures or cuts of plants, has grown this year as we hope it will grow every year, including—Mrs. Ethel Bailey Higgins, San Diego, California; Mrs. Ayako Ohashi, Japan; L. Steger, Ryan, Okla.; E. R. Ziegler, Spencerport, N. Y.; A. W. Grant, Express Publishing Co., San Antonio, Texas; J. R. Pirtle & Sons, Edinburg, Texas; Howard E. Gates, Anaheim, Calif; Dr. W. E. Lowry, Sr., Laredo, Texas; J. W. Robinson, Sebastopol, Calif; Prof. Louis Brand, University of Cincinnati.

We know the "Why of a Cactus Collector" but just can't express it. Many people do wonder. They tell us so. They doubt our sanity. So we have aspired to words of the world's illustrious to say it for us, neatly and completely.

First is the definition by Fritz Kreisler—

"A hobby is a little house into which one can crawl and escape from life's too bitter realities."

"Happy is the man who has a hobby", was the motto of the St. Louis Cactus Association of some 30 to 40 years ago, whose membership included Dr. William Trelease, University of Illinois, one of the world's foremost botanists, the illustrious scientist Agassiz and many others of national and world wide prominence.

"And doubly happy is he who makes cactus his hobby" writes Frank K. Balthis, Horticulturist, Garfield Park Conservatory, Chicago, Ill., in "Desert" Feb. 1933. A member of this organization himself he concludes his article. "Their spirit of wonderful comradeship, and their love for nature lives on".

If the study and growing of these plants forty years ago gave so much pleasure and relaxation how many times can this pleasure be multiplied in these days of increased knowledge, improved methods and greater need for relaxation from the rush of modern life.



Texas - Mexican Border Species and others Pictured on Pages 3, 4 and 5 for both Dealers and Collectors.

**LIST OF CACTI AND ROCK
GARDEN PLANTS.**

- 1—*Opuntia lindheimeri*
- 2—*Opuntia leptocaulis*
- 3—*Opuntia schottii*
- 4—*Opuntia ficus indica*
- 5—*Hamatocactus setispinus*
- 6—*Ancistrocactus scheerii*
- 7—*Echinocereus fitchii*
- 8—*Echinocereus dubius*
- 9—*Echinocereus berlandieri*
- 10—*Escobaria runyonii*
- 11—*Dolichothelos suhaerica*
- 12—*Lophophora williamsii*
- 13—*Wilcoxia poselgeri (Cereus tuberosus)*
- 14—*Neomammillaria heyderi*
- 15—*Coryphantha runyonii*

LARGER TYPES FOR DISPLAYS

ALSO ROCK GARDENS.

- 16—*Homalocephala texensis*
- 17—*Ferocactus hamatacanthus*
- 18—*Agave americana*
- 19—*Agave lechuguilla (Mexican)*
- 20—*Yucca treculeana*
- 21—*Yucca tenuistyla*
- 22—*Euphorbia jatropo berlandieri* (large bulb, red flower.)
- 23—*Euphorbia pedilanthus aphylla* (dainty pink star shaped bloom, in clumps.)
- 24—*Aloe vera*, succulent
- 25—*Manfreda variegata*, hardy desert succulent
- 26—*Dracena*, for rock gardens, landscaping

RARE SPECIES UNDER PROPAGATION

- 27—*Echinocereus papillosus*, dwarf
- 28—*Thelocactus bicolor* (Mexican)
- 29—*Opuntia linguiformis*—rock gardens
- 30—*Opuntia imbricata*—rock gardens
- 31—*Opuntia erinacea* (grizzly bear)
- 32—*Agave americana variegata*
- 33—*Manfreda variegata gigantea*
- 34—*Hechtia texana* Mexican brom liwl, red coloring, agavelike (unsurpassed for rock gardens.)
- 35—*Acanthocereus pentagonus*, tall stout Night Blooming Cereus, best for grafting.
- 36—*Harrisia martini*—stout climbing N. B. C—blooms large and fragrant.

For valuable information on cacti we recommend to dealers and collectors "The Cactus Book" by Dr. A. D. Houghton, 159 pages, 18 illustrations, Cloth.

\$2.25 orders filled promptly.

'OUR NATIVE CACTI'

180 pages, Cloth, 100 illustrations, by Ethel Bailey Higgins, a delightful writer who knows cacti intimately and tells how to succeed with them culturally.

'CACTUS CULTURE'

By Ellen D. Schulz
Profusely Illustrated
186 pages,
Fabrikoid \$2.00



YUCCA TRECULEANA

Effective for Rock Garden.
(Spanish Dagger) Laredo.



"MINIATURE MEXICO"

With rocks and sand, miniature desert and mountain plants and tiny typical, bright colored clay figures, -all in proportion.



HAMATOCACTUS
SETISPINUS
(*Echinocactus bicolor*)
Yellow flower, red center
Laredo

PLANTS



ECHINOCEREUS FITCHII—Laredo
Deep rose blooms - dark centers

PLANTS

LAREDO NATIVE SPECIES FOR BOTH DEALERS AND COLLECTORS.

Photo Mrs. Ayako Ohashi



LOPHOPHORA
WILLIAMSII
(Peyote)—Laredo
Pink flowers
Of historical, religious and medicinal interest.
PLANTS



WILCOXIA POSELGERTI
(*Cereus tuberosus*)
Rose purple blooms—Laredo
PLANTS



By J. J. Thorner and
Frances Bonker
217 Pages
59 Illustrations

Price \$3.50



FEROCACTUS HAMATACANTHUS
Yellow blooms—Laredo
PLANTS



ECHINOCEREUS PENTALOPHUS (berlandieri)—Laredo

Pink flowers
PLANTS



AGAVE AMERICANA—Laredo
(Maguey or Century Plant)
PLANTS

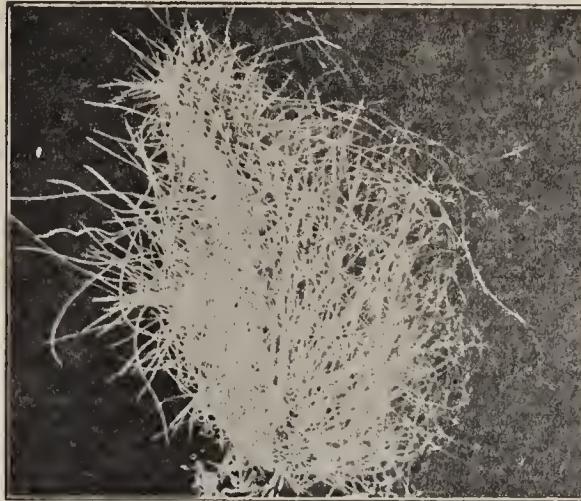
Photo—Ethel Bailey Higgins



ECHINOCEREUS PAPILLOSUS—LAREDO
Yellow Flower—Reddish Brown Center.
PLANTS



HARRISIA MARTINII—South America
This photograph was selected to show the beauty of blooms
of the Cereus group. Good grafting stock for many species.
PLANTS AND SEEDLINGS



OPUNTIA ERINACEA
Western United States
PLANTS



ACANTHOCEREUS
PENTAGONUS

White flower—Night Blooming
Cereus. Best all-round grafting
stock.
PLANTS



ILLUSTRATING INTERESTING PLANTING OF LAREDO
NATIVE CACTI. The plant in the top of the strawberry
jar is Agave lechuguilla, familiar to tourists through Mexico.

The remaining pages of this catalog picture species primarily of interest to collectors of rare plants. The order of species described in the 4 volumes of "The Cactaceae" by Britton and Rose, is followed as closely as possible. This order is followed in our nursery list for collectors of rare plants.

Because of government restrictions on importations of foreign plants it has been impossible for a number of years to obtain plants of many species hereafter illustrated. The problem of obtaining these rare species has been solved by raising them from seed.

Our cover illustrates one section of the several hundred nursery flats devoted to the propagation of these exotics.

VOLUME I. "THE CACTACEAE"

OPUNTIEAE



OPUNTIA MICRODASYS—Mexico
Velvety yellow glochids. Plants of similar
form but red glochids are O. rufida.
PLANTS



OPUNTIA TRICOPHORA
Texas - New Mexico
PLANTS



OPUNTIA
BRASILIENSIS
South America

Even small plants have
attractive tree form.—
Shiny green joints, few
spines.

PLANTS



OPUNTIA GLOMERATA
(papyracantha) S. America.
Dwarf - Paperlike spines. Rare

PLANTS



OPUNTIA OPUNTIA.—of wide distribution through
E. and N. United States.

PLANTS

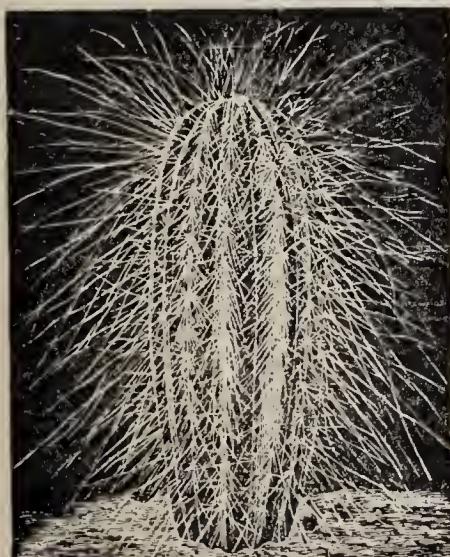


OPUNTIA AORACANTHA
(formidabilis) S. America.
Very rare in collections.

PLANTS



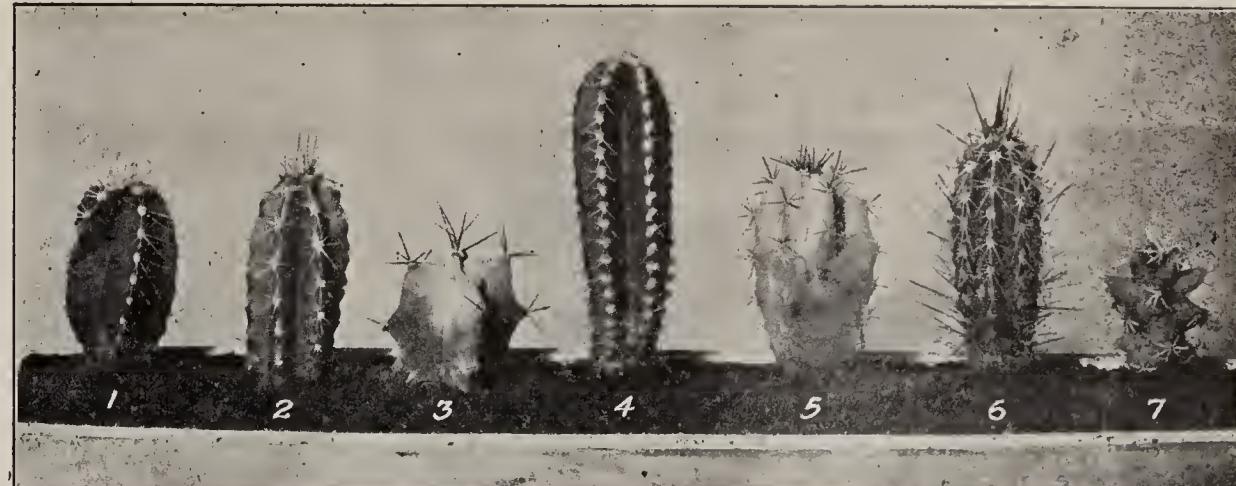
CEPHALOCEREUS SENILIS-Mexico
"Old Man of the Mountain"
Small PLANTS and SEEDLINGS



CEPHALOCEREUS
HOPPENSTEDTII
Mexico.
SEEDLINGS

VOLUME II "THE CACTACEAE" CEREANAE

Of the several hundred species of cerei we picture only some 35 to 40 but these will show the variety of form, of flowers and habits of growth. Many are rapid growers and soon make specimen plants.



SEEDLINGS of Mexican Species

- | | | |
|-------------------------------------|-------------------------------------|---------------------------------|
| 1— <i>Lemaireocereus dumortieri</i> | 3— <i>Lemaireocereus de Mixteca</i> | 6— <i>Lemaireocereus weberi</i> |
| 2— <i>Lemaireocereus stellatus</i> | 4— <i>Pachycereus marginatus</i> | 7— <i>Coryphantha exsudans</i> |
| | 5— <i>Lemaireocereus de Toliman</i> | |



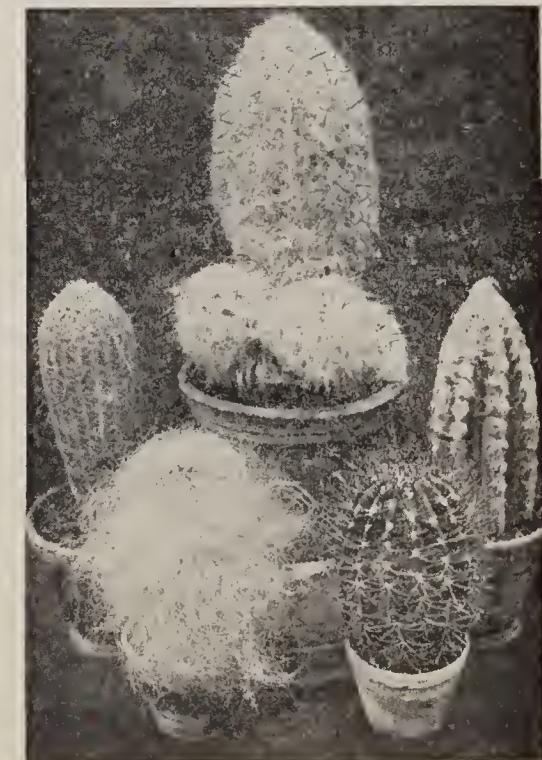
OREOCEREUS CELSIANUS
South America
SEEDLINGS



ACANTHOCEREUS
PENTAGONUS

Gulf of Mexico from Fla. to
Northern S. America.
Night Blooming Cereus.
Highly recommended as Grafting
stock. Blooms readily from
cuts.

PLANTS



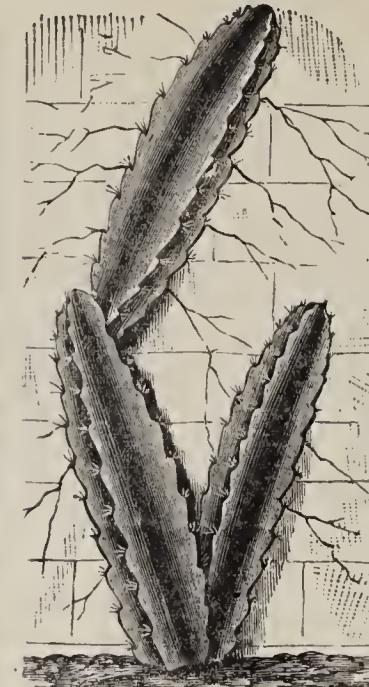
Front Row—CEPHALOCEREUS SENILIS—Mexico.
and Denmoza RHODACANTHA—S. America.
Back Row—ESPOSTOA LANATA—S. America.
OREOCEREUS TROLLII—S. America.
CEPHALOCEREUS PALMERI—Mexico.



STETSONIA CORYNE
South America
SEEDLINGS



NYCTOCEREUS SERPENTINUS
Mexico.
Free flowering, quick growing
species.
PLANTS



HYLOCEREUS
TRIANGULARIS
Tropics
PLANTS



CARNEGIEA GIGANTEA
Arizona giant cereus.

The plant illustrated above is many hundred years old.

Small PLANTS and SEEDLINGS



CEREUS PERNAMBUCENSIS
(formosus monstrosus)
South America.
Small PLANTS



A FINE COLLECTION OF CERCI
The majority of these are rooted cuts.



POKON

P₂ 21-1/2%

O₅ 27-1/2%

K₂ 16-1/2%

Total 65-1/2%

POKON

POKON

50 cents
per bottle.

PURIFIED PLANTFOOD FOR CACTI AND OTHER SUCCULENTS.

To choose plantfood for Cacti and other Succulents is a matter of serious consideration. Where POKON is being specially prepared for potted plants and plants which require pure food (Cacti, etc., orchids, etc.) the problem has been met. Since its introduction many Cacti enthusiasts have approved of the quality of POKON and have testified of the excellent results obtained.

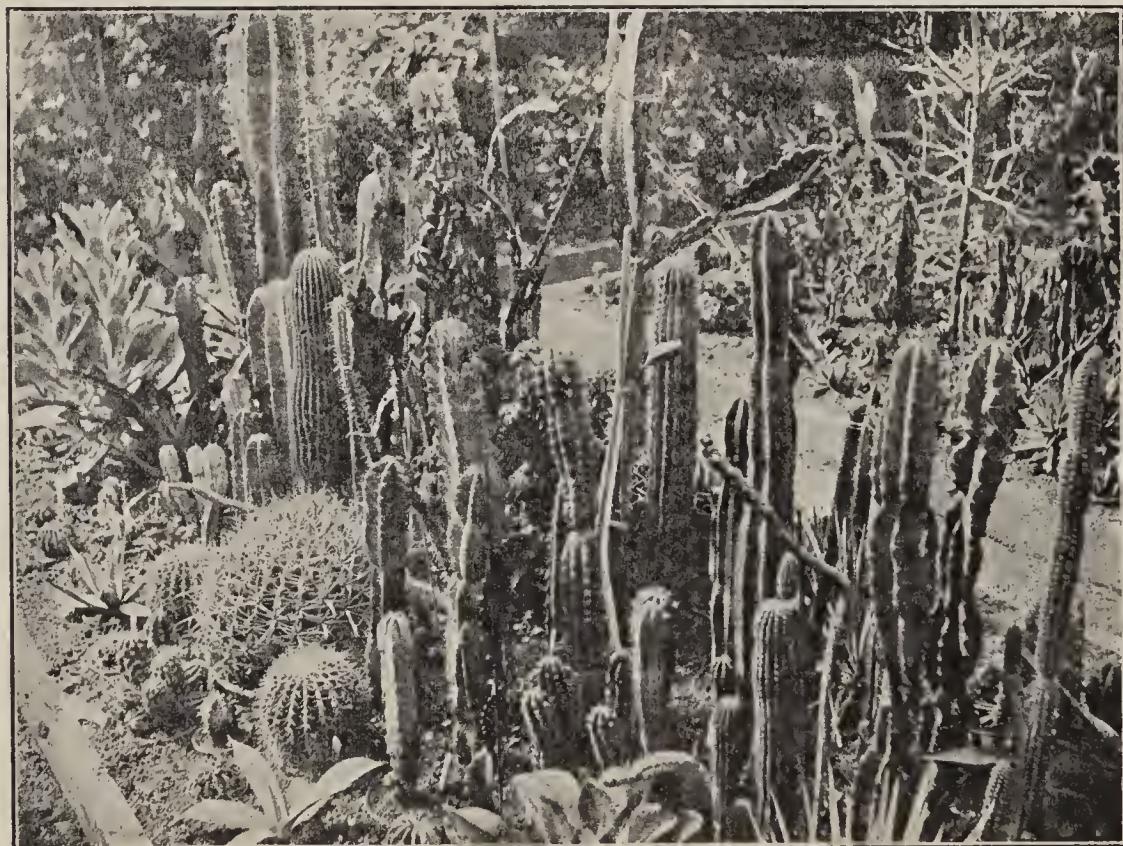
A plantfood free of impurities, instantly and totally soluble in water; 65½% available plantfood. Sold in glass. This insures the keeping quality. One bottle contains 400 feedings for 4" potted plant; or 300 feedings for 5" pot plant, or 200 feedings for 6" pot plant. At dealers in California.

By mail from distributor; T. C. Spruit,
Encinitas, California.

A COLLECTION OF NURSERY PLANTS

- 1—Nopalea cochenillifera
- 2—Opuntia leptocaulis
- 3—Opuntia imbricata
- 4—Opuntia subulata
- 5—Opuntia microdasys
- 6—Opuntia monacantha var.
- 7—Opuntia lindheimeri
- 8—Opuntia erinacea
- 9—Opuntia brasiliensis
- 10—Cereus peruvianus
- 11—Cephalocereus senilis
- 12—Cephalocereus rostenii
- 13—Pachycereus marginatus
- 14—Lemaireocereus hystrix
- 15—Lemaireocereus thurberi
- 16—Wilcoxia poselgeri
- 17—Nyctocereus serpentinus
- 18—Acanthocereus pentagonus
- 19—Carnegiea gigantea
- 20—Lophocereus schottii
- 21—Ariocarpus fissuratus
- 22—Hamatocactus setispinus
- 23—Ferocactus wislizeni
- 24—Ferocactus hamatacanthus
- 25—Homalocephala texensis
- 26—Astrophytum myriostigma
- 27—Astrophytum asterias
- 28—Astrophytum capricorne
- 29—Astrophytum ornatum
- 30—Cactus intortus.

VOLUME II. "CEREANAE" (continued)



Picture of a display bed of Peter Hoffmann, 92 Highgate Ave. Buffalo, N. Y., made in 1920. Many of these plants are still flourishing in his collection. Plants are in pots, imbedded, convenient for winter removal indoors. Their healthy appearance and longevity testify to the success of this plan for gardeners in cold climates.



ECHINOCEREUS FITCHII—Laredo
Rose blooms about Easter
PLANTS



ECHINOCEREUS PAPILLOSUS—Laredo
Yellow blooms. Rare in collections
PLANTS



Photo L. Steger
FEROCACTUS
UNCINATUS
Brown flowers
Texas and Mexico
PLANTS

ECHINOCEREUS
TRIGLOCHIDIATUS
Chinese red blooms
Texas
PLANTS



ECHINOCEREUS PENTALOPHUS—(BERLANDIERI)
Pink flowers Laredo
PLANTS



ECHINOCEREUS
REICHENBACHII
Texas
(White lace)
PLANTS



ECHINOPSIS
MULTIPLEX
SEEDLINGS



ECHINOCEREUS
ENGELMANNII
S. W. United States
PLANTS

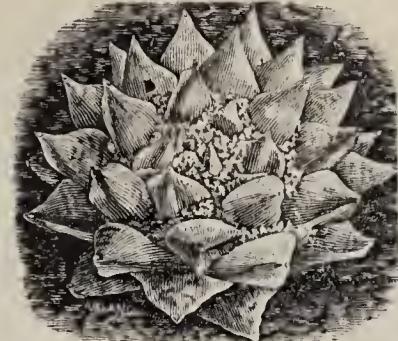
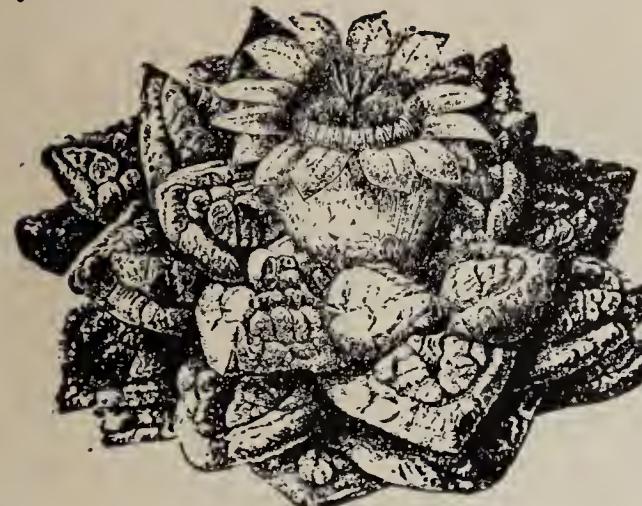


ECHINOPSIS MULTIPLEX
CRISTATA



Photo L. Steger
AN ECHINOPSIS
in bloom
South America
PLANTS & SEEDLINGS

Echinopsis are worthy of their lasting popularity. They are mostly globular in form, are hardy, but also grow well indoors, bloom in four years from seed, have very attractive flowers, yellow, pink or white. Specimens are available of both named and unnamed species, all good.



ARIOCARPUS RETUSUS

Mexico

ARIOCARPUS FISSURATUS
(Living Rock) Texas & Mexico
Rose pink flower Fall bloomer
PLANTS



ARIOCARPUS TRIGONUS

Mexico

SEEDLINGS

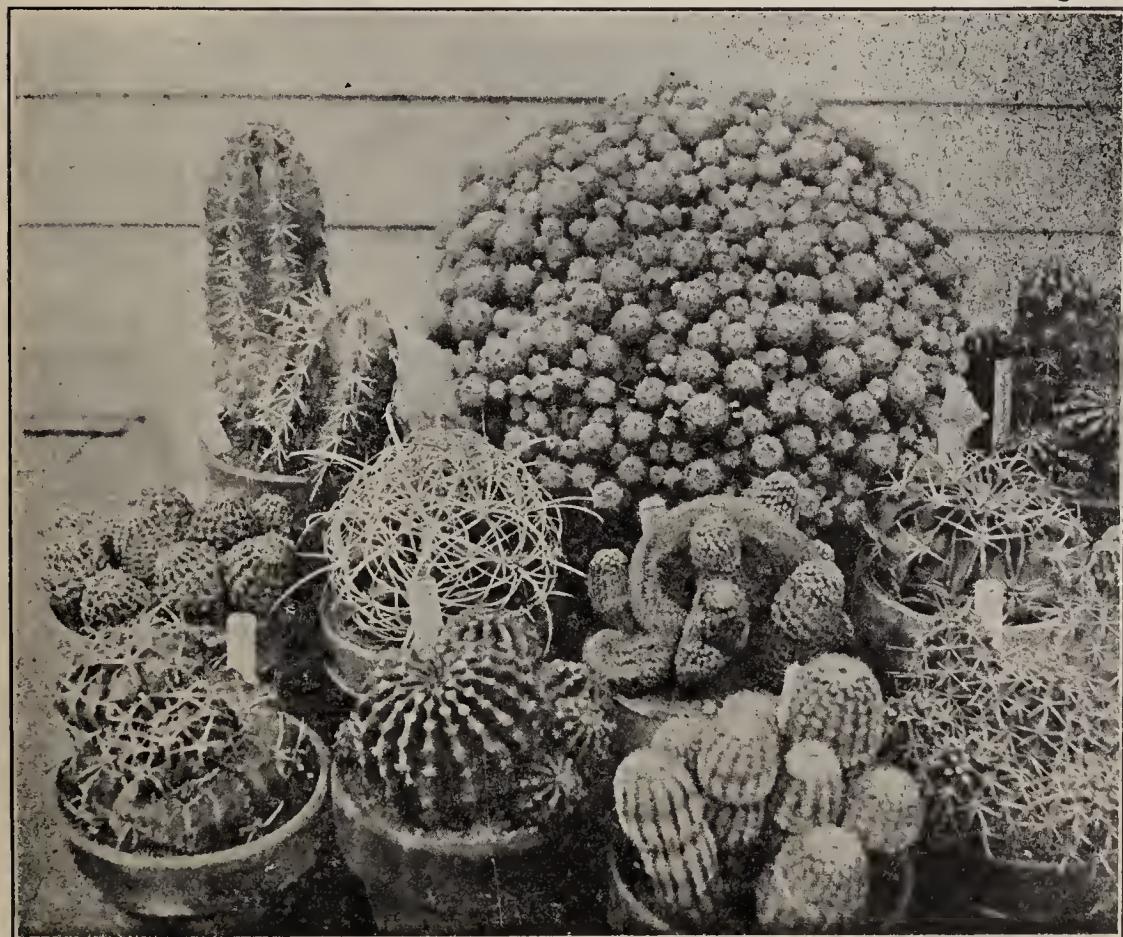


EPITHELANTHA MICROMERIS
(Button) Texas and Mexico
PLANTS and SEEDLINGS

ECHINOCEREANAE

VOLUME III.

(Continued)



ROW 1

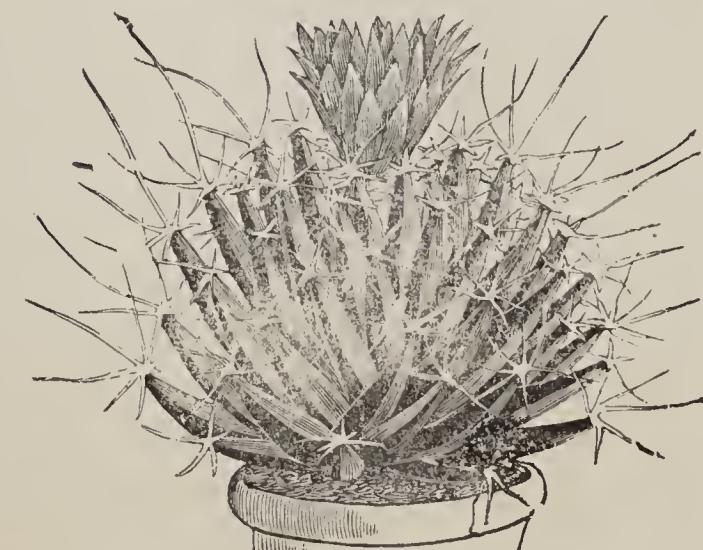
Homalocephala
texensis, Echinopsis
eyriesii,
Echinocereus
reichenbachii.

ROW 2—

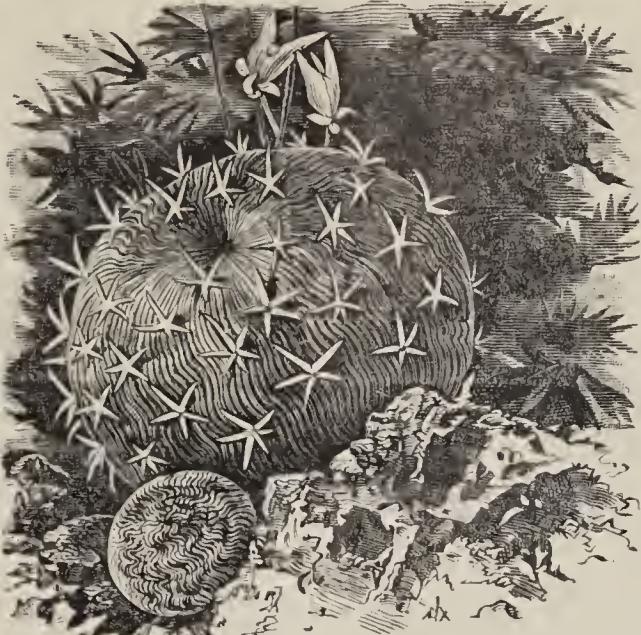
Echinocereus
viridiflorus,
Ferocactus lecontei.

ROW 3—

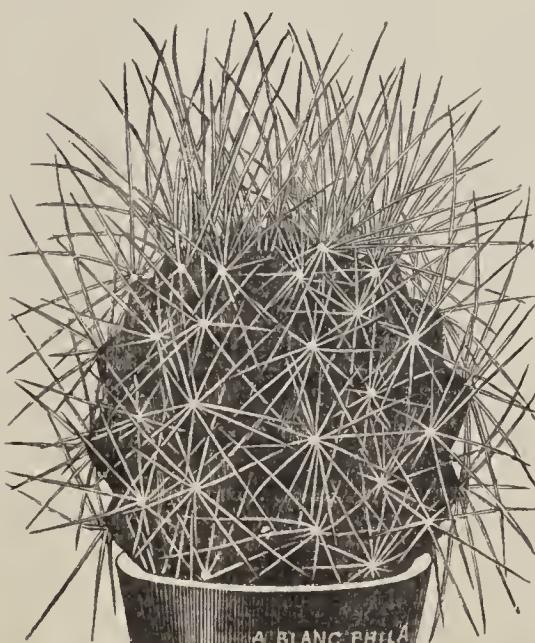
Large clump is
Neomammillaria
multiceps.



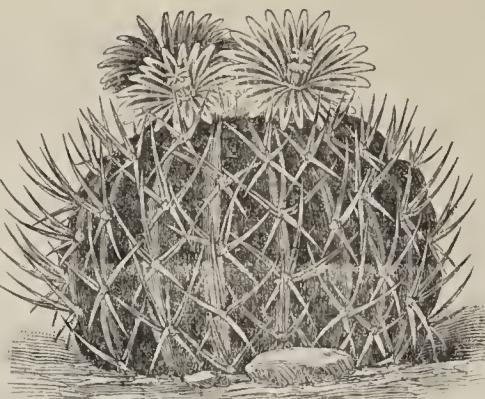
LEUCHTENBERGIA PRINCIPIS—Mexico.
Very rare in collections
SEEDLINGS



ECHINOFOSULOCACTUS MULTICOSTATUS
Mexico
SEEDLINGS



FEROCACTUS HAMATACANTHIUS
Laredo, Texas
PLANTS



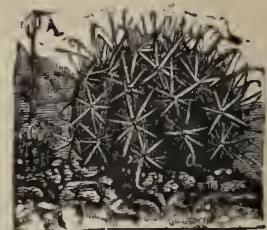
ECHINOFOSULOCACTUS
COPTONOGONUS—Mexico
SEEDLINGS



FEROCACTUS LATISPINUS
(cornigerus) Mexico
SEEDLINGS

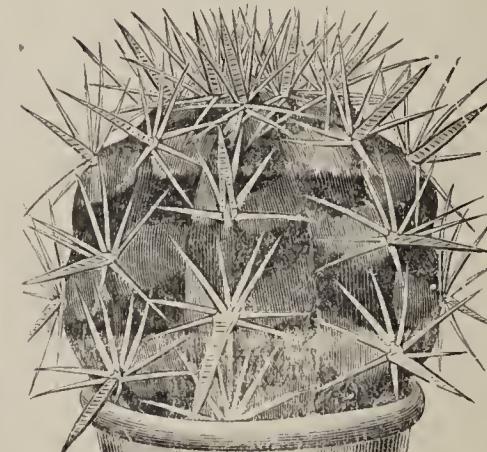


ECHINOFOSULOCACTUS
CRISPATUS—Mexico
SEEDLINGS



FEROCACTUS
WISLIZENII
U. S.

PLANTS and
SEEDLINGS

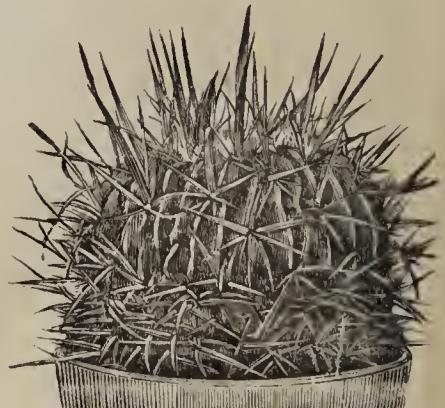


ECHINOCACTUS HELOPHORUS
SEEDLINGS
Mexico



FEROCACTUS
VIRIDESCENS
U. S. and L. Calif.

PLANTS and
SEEDLINGS



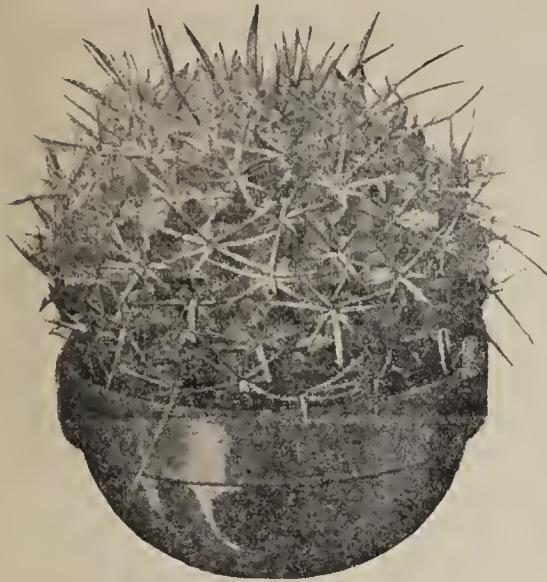
FEROCACTUS LECONTEI—U. S.
PLANTS and SEEDLINGS

ECHINOCEREANAE—(Continued)

A Page of Blanc Illustrations.

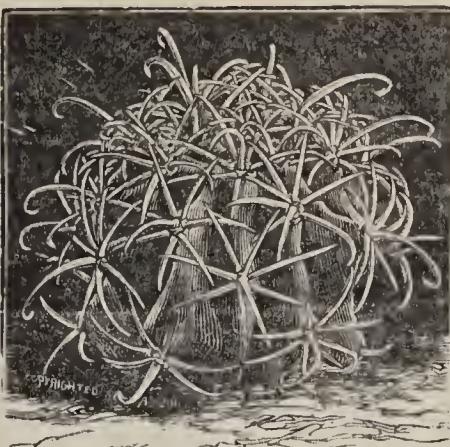
SEEDLINGS of Echinofossulocactus have a most fascinating spine structure. Illustration I is misleading in its impression of great size as even full grown plants are small in comparison with many species.

Ferocacti are very satisfactory, both as Plants and Seedlings.



FEROCACTUS PRINGLEI—Mexico
Most attractive red spines interwoven with
white hairs.

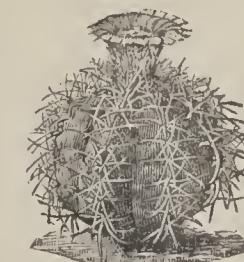
SEEDLINGS



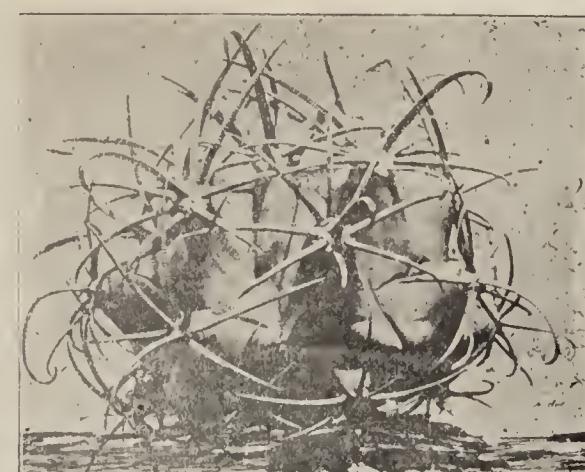
FEROCACTUS COVILLEI

Illustrated by Blane cut.

VOLUME III. ECHINOCEREANAE (continued)



ECHINOCACTUS
HORIZONTALONIUS
PLANTS



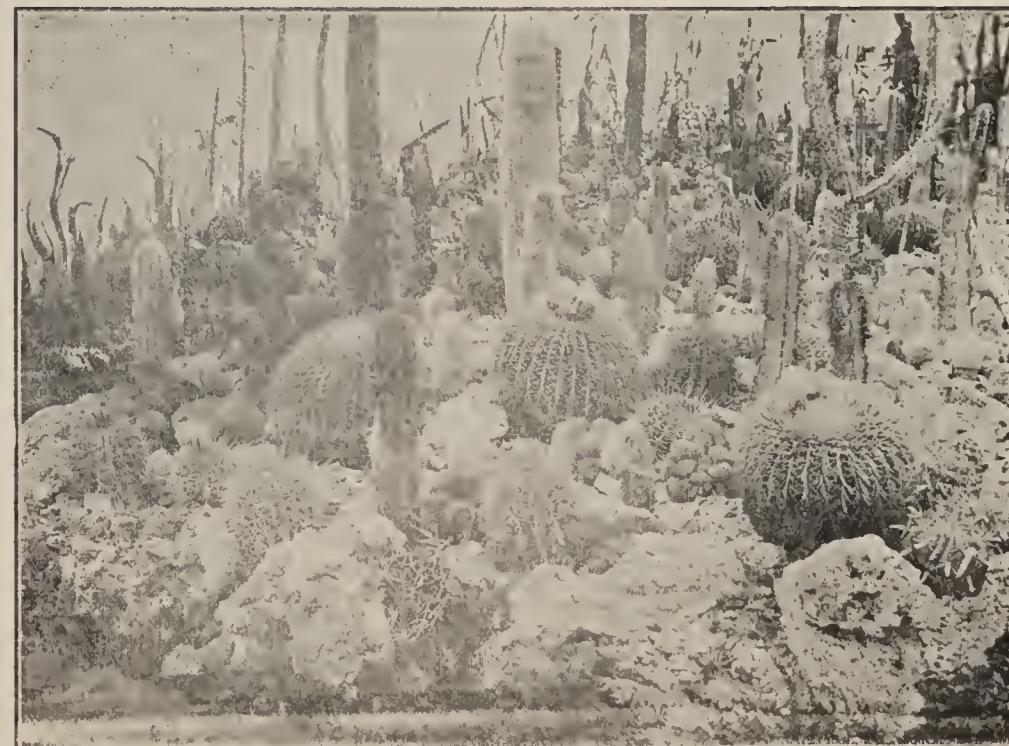
FEROCACTUS COVILLEI
Illustrated by photograph.

SEEDLINGS



ECHINOCACTUS GRUSONII—(The Golden Cactus)
Mexico.

Rare and very handsome
SEEDLINGS



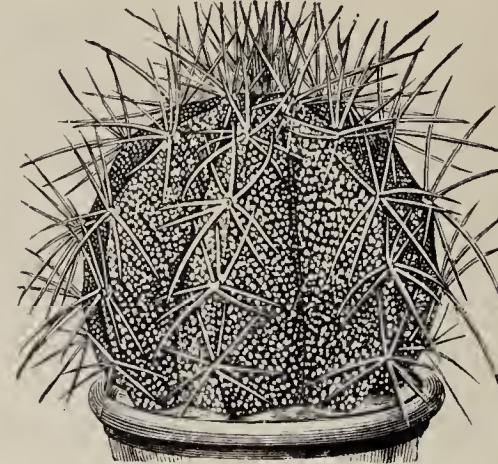
A handsome rockery of rare specimens. Large round plants are
E. grusonii, taller one are cerei.



ASTROPHYTUM MYRIOSTIGMA
Mexico
(Bishop's Mitre) Yellow flowers
Small PLANTS and SEEDLINGS



ASTROPHYTUM ASTERIAS—Mexico.
(Sea Urchin) Yellow flower
PLANTS and SEEDLINGS



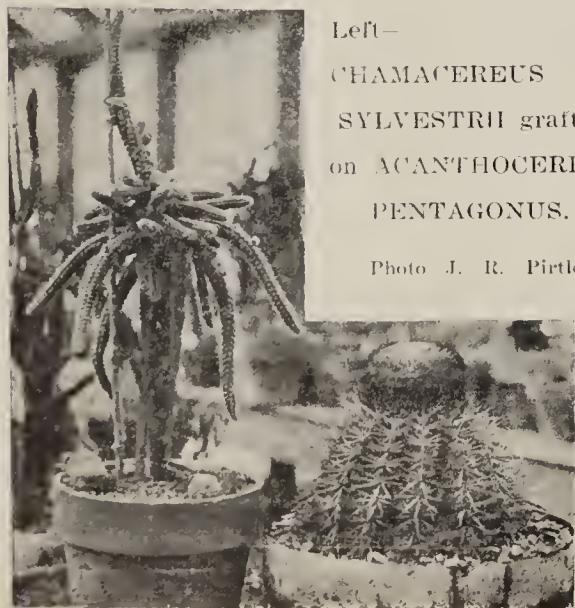
ASTROPHYTUM ORNATUM
Mexico. Yellow flowers
Small PLANTS and SEEDLINGS



THELOCACTUS BOLANSIS
Mexico
Photo-Mrs. Ayako Ohashi



ASTROPHYTUM CAPRICORNE
Mexico
Yellow flower with brown center
PLANTS and SEEDLINGS

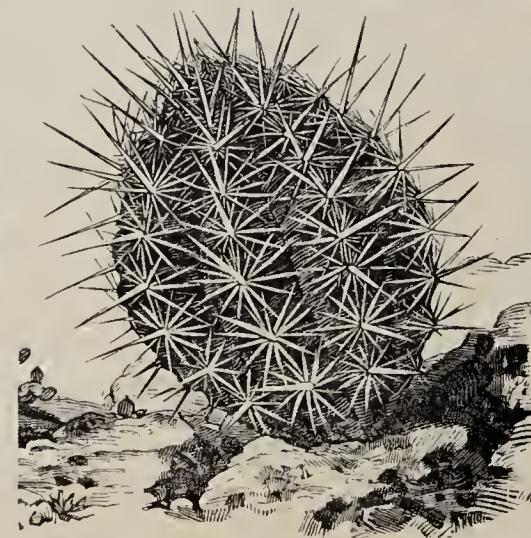


Left—
CHAMACEREUS
SYLVESTRII graft
on ACANTHOCEREUS
PENTAGONUS.
Photo J. R. Pirtle

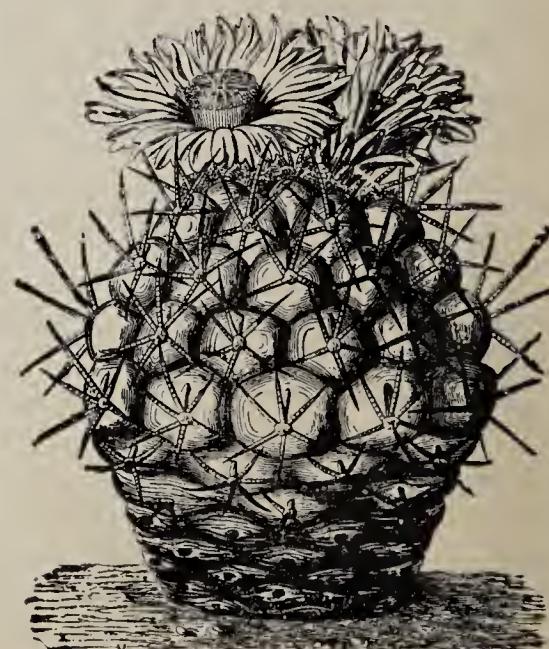


CACTUS INTORTUS
West Indies
(Turk's cap) rose flowers
SEEDLINGS
Above and at Left

By photograph and Blanc
illustration.



THELOCACTUS BICOLOR
Texas and Mexico
Very large rose blooms.
PLANTS



THELOCACTUS HEXAEDROPHORUS
Mexico
SEEDLINGS



THELOCACTUS NIDULANS—Mexico.
SEEDLINGS

VOLUME IV.
CORYPHANTHANAE—(Continued)



CORYPHANTHA ELEPHANTIDENS
Mexico
SEEDLINGS



CORYPHANTHA ECHINUS
Texas and Mexico
PLANTS



CORYPHANTHA ROBUSTISPINA
Arizona and Mexico
SEEDLINGS



C. ECHINUS



CORYPHANTHA VIVIPARA
Texas to Canada



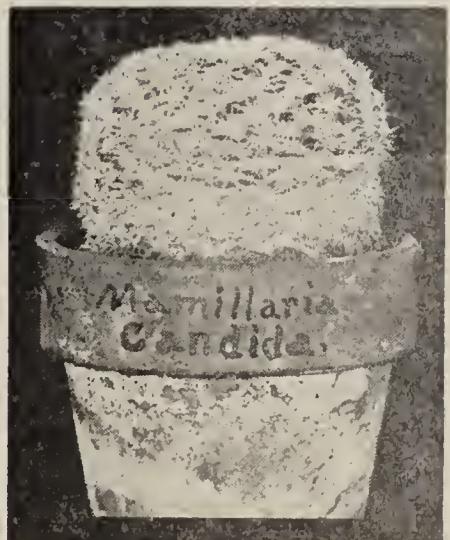
CORYPHANTHA
NEO-MEXICANA



ECHINOMASTUS MACDOWELLII
Mexico
SEEDLINGS



NEOMAMMILLARIA HAHNIANA Mexico.
One of rarest and finest of Mexican species
Small PLANTS and SEEDLINGS



NEOMAMMILLARIA CANDIDA
Mexico.
SEEDLINGS



NEOMAMMILLARIA
RHODANTHA
Mexico



SOLISIA PECTINATA
Mexico

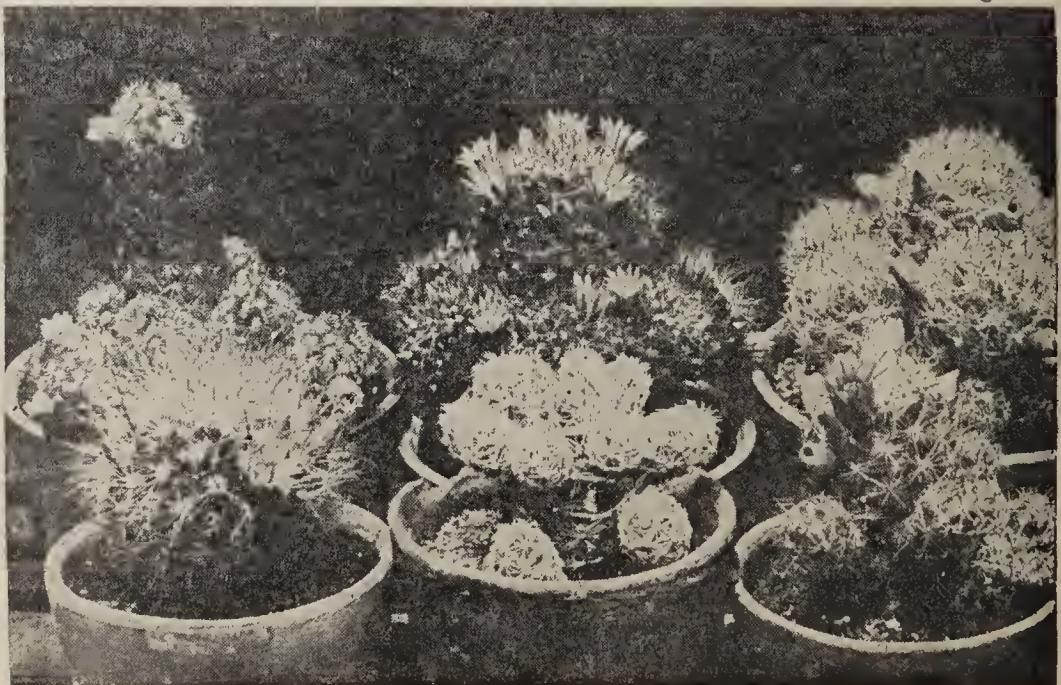


NEOMAMMILLARIA DENSISPINA
Mexico.



Mam. Pringlei

NEOMAMMILLARIA PRINGLEI
Mexico.



A GROUP OF NEOMAMMILLARIAS
This genus is noted for the intricate designs shown in the spine arrangements many of them resembling pictures of enlarged snow flakes. They grow from Nevada to Northern South America. Mexican species are especially fine.



All Photos except 7, 8, 11 by W. E. Lowry, Sr. M. D.

- 1—*Cereus stenogonus*
- 2—*Monvillea cavendishii*
- 3—*Lemaireocereus griseus*
- 4—*Machaerocereus gummosus*
- 5—*Acanthocereus pentagonus*
- 6—*Echinocactus blanckii*

- 7—*Echinocactus reichenbachii*
- 8—*Thelocactus bicolor*
- 9—*Coryphantha sulcata*
- 10—*Dolichothele sphaerica*
- 11—*Neomammillaria elongata*
- 12—*Neomammillaria microcarpa*



ECHINOCEREUS PERBELLUS
Pink blooms—Texas-New Mexico

PLANTS

Photo W. E. Lowry, Sr. M. D.



AGAVE NICKELSAE
Mexico

Very similar to *A. victoria-regina*, of close compact growth. Markings are pure white on dark green making a striking plant in any garden or collection.

PLANTS and SEEDLINGS

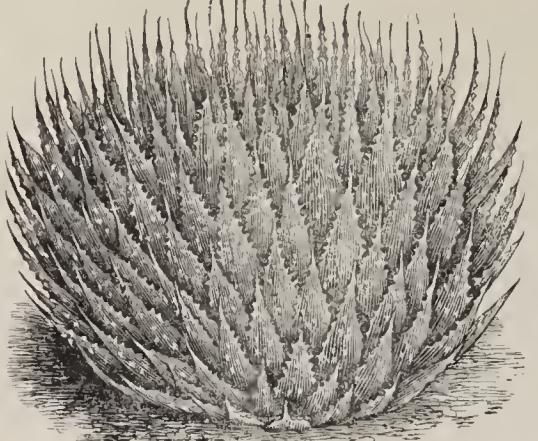


ALOE VARIEGATA—Africa
(Partridge breast)
PLANTS and SEEDLINGS

SUCCULENTS—MAJORITY OF AFRICAN ORIGIN



HAWORTHIA MARGARETIFERA—Africa
PLANTS



ALOE ARISTATA—Africa
An aristocrat in succulent collections
PLANTS and SEEDLINGS

Be careful not to put plants any deeper in soil than their natural soil line. If necessary steady plant with temporary stakes.

The propagation of cacti from seed is one of the most fascinating of hobbies. Detailed instructions accompany all orders of seed.



HAWORTHIA COARCTATA
Africa
PLANTS



AN ECHEVERIA—Mexico
Plants available of a number
of named species.



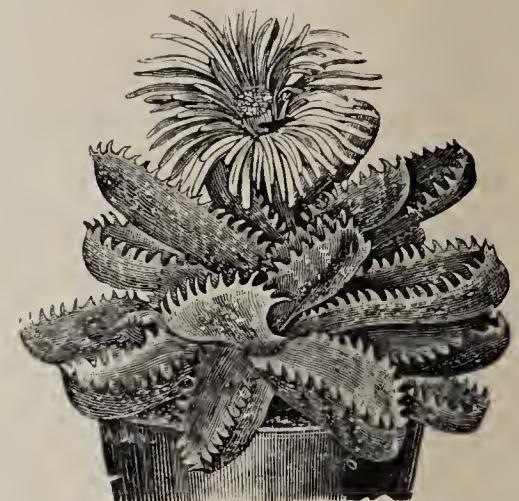
ALOE PICTA—Africa
SEEDLINGS



KLEINIA
ARTICULATA
(Candle Plant)
Africa
PLANTS



URBINIA ACAVOIDES
Mexico



FAUCARIA TIGRINA—Africa
A Mesembryanthemum
PLANTS



A STAPELIA—Africa
(Asclepiadaceae)

Illustrated to show star shaped flower of all members of this family - Caralluma-Duvalia - Huernia - Hoodia, Trichocaulon, etc. 100 or more named species.
PLANTS and SEEDLINGS



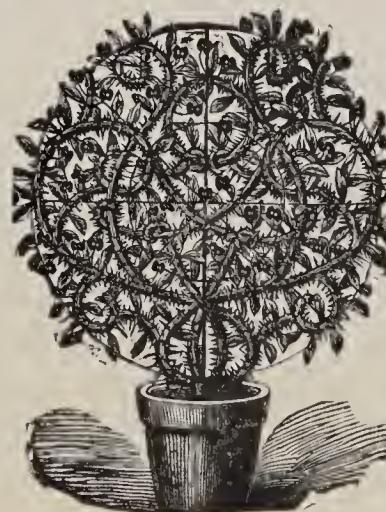
A GROUP OF EUPHORBIAS

AFRICA, CANARY ISLANDS, MOROCCO

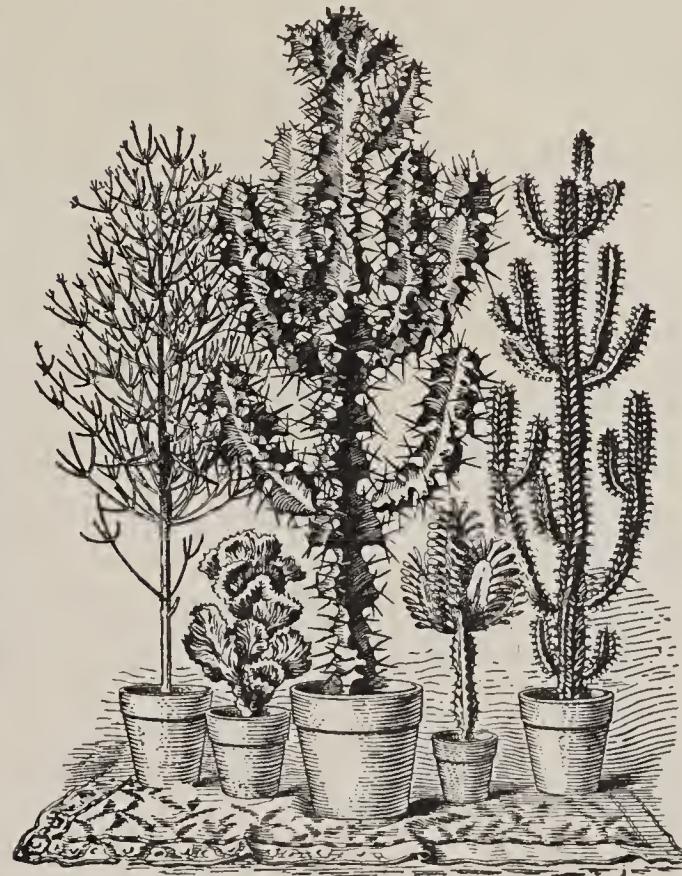
- | | |
|-------------------|---------------------------|
| 1—E. grandicornis | 8—E. splendens |
| 2—E. canariensis | 9—E. tirucalli |
| 3—E. natalensis | 10—E. lactea cristata |
| 4—E. pseudocactus | 11—E. natalensis cristata |
| 4—E. lactea | 12—E. resinifera |
| 6—E. grandidens | 13—E. caput-medusae |
| 7—E. nerifolia | 14—E. coeruleascens |
| 15—E. ornithopus. | |



EUPHORBIA SPLENDENS
(Crown of Thorns)
Madagascar
PLANTS



CACTUS ROCK GARDENS— DISPLAY BEDS



real desert finish and atmosphere.

Watering of rock gardens should be decreased in late summer so that plants will begin the winter partially shrunk and in safe condition to withstand cold and moisture. If too plump and succulent they are liable to frost rupture. Rock gardens should be planted in spring and summer to give plants time to reroot.

EUPHORBIAS

Euphorbias are not cacti, but are propagated under similar conditions. They have fleshy stems, are sometimes quite thorny, are mostly leafless in character, making them natural companion plants to cactus. Insects do not trouble them, and as they grow rapidly they are very satisfactory members of any collection.

We have for collectors—E. lactea, E. grandicornis, E. tirucalli, E. pseudocactus, E. canariensis, E. tithymalus, E. mitriformis, E. obesa, E. splendens and others.

GRAFTING

There are many different reasons for the grafting of one species of cactus upon a different species but it is generally done to produce a stronger and more rapid growth and an increased flower production in the grafted species. The operation is simple and if done with accuracy, rapidity and cleanliness is almost uniformly successful. A very sharp, thin-bladed knife, a few cactus spines and some small rubber bands are the only implements needed.

The host plant is called the stock and the plant grafted into it is called the scion. The main requirement for success is to get and to maintain for a week or two an exact approximation between the freshly cut surfaces of stock and scion so that they unite exactly as do the edges of a clean cut flesh-wound when properly sutured. In grafting one of the globular cacti on a cylindrical species, such as *Trichocereus spachianus* or *Acanthocereus pentagonus*, select a stock of approximately the same diameter as the scion and cut it squarely across at right angles to the line of growth with one sweep of the knife. Cut off the base of the scion in the same manner and place the two cut surfaces together immediately and skewer the scion to the stock securely with two or three long slender spines. Pass the rubber band around the base of the stock bringing one end through the other, draw tight and bring the resulting loop up over the top of the scion so that it holds the scion tightly against the stock. Two or more bands may be used if necessary to an exact and firm approximation. Most stocks have sufficient spines to hold the lower loop from slipping upward and the spines, ribs, nipples or irregularities on the upper surface of the scion are enough to prevent the upper loop from slipping off. I prefer the rubber bands to twine as their elasticity keeps up a steady pressure while the twine may stretch, also the contraction of the rubber compensates for the slight shrinkage of the two cut surfaces and holds them together steadily and continually. In this type of grafting I have not found it necessary to protect the top of the scion with a pad of cork or paper.

Other forms of grafting are the "stab graft", the "saddle graft" and the "wedge graft". The stab graft is used in grafting one of the thicker cacti upon a slender and more or less woody stock such as *Pereskia pereskia* the diameter of the scion being double or more than that of the stock. In this case the tip of the stock is shaved down on either side into a thin slender wedge and forced into the scion until the cut surface is completely buried. In scions with a thick and hard outer surface it is better to make a slight incision to facilitate the

entrance of the wedge. One spine through scion and stock is sufficient to hold this graft.

In case the scion and stock are of about the same diameter the saddle graft may be used. This is very similar to the stab graft but with a wedge corresponding to the wedge on the stock cut out of the end of scion. One spine through scion and stock is required and the base of the scion should be firmly bound with a rubber band both above and below the spine.

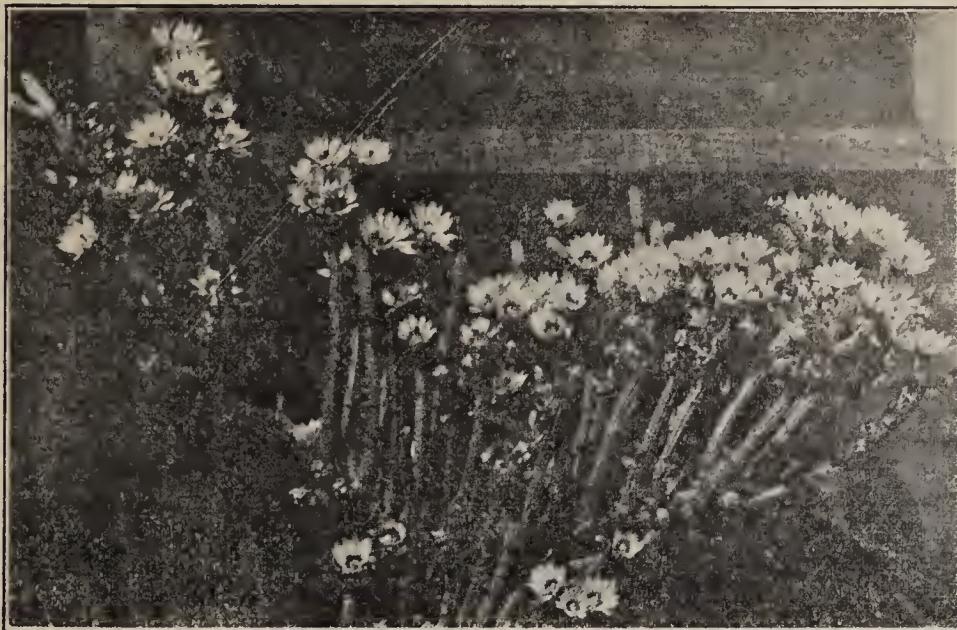
The wedge graft is the reverse of the saddle graft, the end of the scion is given the wedge shape and inserted into a corresponding cut in the stock, the rubber band being placed around the upper end of the stock. In grafting some of the very thin species, *Epiphyllums* *Zygocactus*, *Schlumbergeras* etc., it may not be necessary to do more than make a straight cut in the stock but the scion should always be shaved down to a fine edge.

A very satisfactory variation of the wedge graft requires a special knife made somewhat like the old fashioned apple-corer but tapering to a slender point. With this knife a slender cone is cut from the top of the stock, the scion sharpened like a lead pencil, inserted and held by a spine. This is a very satisfactory method to use in grafting *Wilcoxias*, *Rhipsalis* and other very slender species. No wax is needed in cactus grafting but for some time I have practiced sprinkling Semesan saturated sand over all exposed cut surfaces and believe it has a very marked effect in prevention of rot.

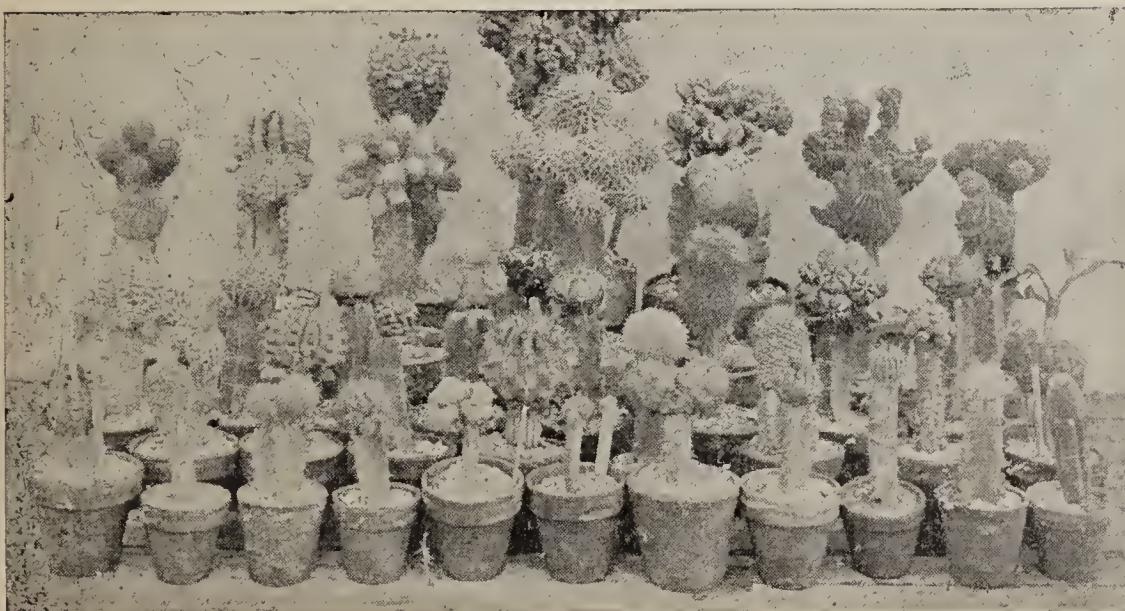
Do not allow water to come in contact with fresh grafts and keep them in the shade for the first week. The rubber bands may be removed in from four to seven days but unless they show evidence of being too tight and strangling the plant it will do no harm to leave them longer.

Almost any cactus will "take" if grafted on a species of its own genus or of a genus further back in the evolutionary chain. Most species take well on *Pereskias*, *Epiphyllums* thrive wonderfully on *Nopalaeas* and the rank growing *Opuntias*. *Trichocereus spachianus* and *Nyctocereus serpentinus* are excellent stock for *Echinocerei*, *Echinopses*, *Coryphanthias* and *Neomammillarias*. *Wilcoxias* and *Peniocereus greggii* grow rapidly on *Harrisia martini*. The most satisfactory stock that I have found for all purposes is *Acanthocereus pentagonus*.

W. E. Lowry, Sr., M. D.



A 2 year graft of WILCOXIA POSEGERI on Acanthocereus pentagonus.
Flowers rosy purple-lasting—400 or more during blossoming season.



Examples of unusual forms obtained by grafting. Picture shows plants of E. G. Greiner, members of the St. Louis Cactus Association in existence some 30 to 40 years ago, whose motto was "Happy is the man who has a hobby".
We have many photographs of the unusually extensive plantings of this well known dealer and collector.

GRAFTING



*APOROCACTUS
FLAGELLIFORMIS*

(rat-tail) and *Zygocactus truncatus* (crab) on same graft.

Below—

Graft of *CHAMACEREUS SYLVESTRII* on *Acanthocereus pentagonus*, flowers orange.



Above—

Graft of *SCHLUMBERGERA MAKOVANUM* (*gaertneri*) on *Pereskia*. Blooms are bright red, funnel shaped-lasting. Easter.

Photo J. R. Pirtle

CACTUS INTORTUS or
Turk's Cap.

The white woolly, red spined, cephalium is a natural growth in which are developed the rose colored flowers and fruit.

SEEDLINGS.



ABOVE—CEPHALOCEREUS PALMERI—MEXICO
ABOVE RIGHT—PACHYCEREUS PRINCIPALIS—
LOWER CALIFORNIA
BELOW—ECHINOPSIS EYRIESII—
SOUTH AMERICA



ABOVE LEFT—LEMAIREOCEREUS THURBERI—L. CALIFORNIA
ABOVE RIGHT—WILCOXIA POSELGERI—LAREDO, TEXAS



ABOVE—LOPHOCEREUS SCHOTTII—
LOWER CALIFORNIA
BELOW—FEROCACTUS TOWNSENDIANUS—
LOWER CALIFORNIA



ABOVE—AGAVE PALMERI—ARIZONA
ABOVE LEFT—COCHEMIEA POSELGERI—
LOWER CALIFORNIA
LEFT—MACHAEROCEREUS GUMMOSUS—
LOWER CALIFORNIA PICTURES—HOWARD E. GATES
OTHER PHOTOGRAPHS—DR. W. E. LOWRY, SR.



HINTS FOR SUCCESSFUL PROPAGATION OF CACTI.

Cacti are native only to the American continent growing from Canada to southern South America. They are succulents. A succulent is any plant which is especially fitted with thickened joints and epidermis to withstand drought. All cacti are succulents but there are many other members of the succulent family besides cacti.

CUTTINGS

Propagation by cuttings is one of the most popular and successful forms of cactus propagation. Make a clean cut and allow cutting to callous over before planting. This will take 2 or 3 days for thin species and a week for stout types. One can obtain specimen plants very much quicker from cuts than by raising the same species from seed.

Many propagators advocate rooting of cuttings in absolutely dry clean, sharp sand. It is surprising how soon small roots will begin to form. When a nest of roots has formed then transplant to planting soil.

During late Fall and Winter we have done much successful rooting of both cuts and plants by planting them in dry soil in a fairly cool place and leaving them without watering until spring. At this season the majority of cacti growing outside are dormant. This is their resting period after which they bloom more freely the next spring. Plants kept in the home under ordinary living room temperatures do not become dormant as they do in nature.

SOIL.

Looseness of soil for both cacti and succulents is very advisable. A soil made up of one-third each of good garden loam, well rotted leaf mould and clean, sharp, coarse sand will not pack hard. To this should be added a quantity of ground old mortar as the majority of cacti require it. Ground charcoal is excellent in soil mixtures intended for pots, not for what it will do but for what it may prevent.

Sand assists in aerating the soil and in quick drainage of excess water away from the roots two essentials in successful cactus gardening.

WATER.

Rainwater is always preferable to hydrant water for plants. Many valuable life giving properties from the air are incorporated in all rain water and are made available to plants because of being in solution. The soil about rooted plants should never be allowed to become absolutely dry for any great length of time. Plants newly put out should be watered very sparingly for several weeks or until their root systems have taken hold and gone to work again.

AIR.

The air in many houses is kept much too dry for both humans and plants. Greenhouses and conservatories can be regulated easily while for home collections a bay window can sometimes be enclosed or a miniature greenhouse effect obtained by using a Wardian case, a small show case or a discarded aquarium. Otherwise improved moisture conditions must be obtained by creating evaporation in some manner.

POTTING.

As a general rule use pottery which is porous, so pots will dry out quickly. Place a piece of broken pot over hole in the bottom, fill for two to four inches with pebbles, charcoal, crushed oyster shell to encourage drainage. Bowls without drainage can be used if they have plenty of the above mixture and are not watered so often, but we do not advise them.

FEEDING CACTI AND OTHER SUCCULENTS

Have you ever carefully dug up a Cactus or another succulent?

Perhaps you have taken it for granted that the plant should have such an extensive root system, and consequently has been able to supply its needs.

But place such a plant in the confinement of a pot, and it will soon be apparent that the plant might be in need of food.

Food for Cacti and other succulents is difficult to combine, as the plants desire very pure foods, free from impurities like chlorides, etc.

The analysis should be in 3—4—5 form:

3—Nitrogen, as the plant should not be forced under any circumstances.

4—Phosphoric Acid, to assure healthy root development and tendency to produce a large number of flowers and consequently seeds.

5—Potash, for strong fibres and resisting qualities against attack by fungi or insects.

The purity of chemical fertilizers can readily be determined from the percentage of available plantfood. Those highest in analysis are the purest. They will be more expensive than the lower grades of fertilizers, but they will be proportionately more effective.

For best results with Cacti and other Succulents very high percentage complete plantfood is being advised.

T. C. SPRUIT,

Encinitas, California.

PLANT LISTS FOR COLLECTORS

We issue each year a list of rare plants for collectors. We are one of a very limited number of cactus dealers in the United States possessing all 4 volumes of "The Cactaceae", which is the world's recognized encyclopedia on cactus. This investment enables us to give our customers an unusual service in correctly named plants.

TERMS:

Our business is conducted entirely on a "Cash with Order" basis. Eliminating all possible overhead we concentrate on operating a real nursery and are able to give our customers full value and more at all times.

All Shipments are Net F. O. B.
Laredo.

We recommend Express Charges Collect as the most satisfactory method of shipping. The majority of orders weigh 10 pounds or more and for these it is also most economical.

For orders of small plants and seedlings allow 10 per cent for postage; for larger sizes 20 per cent. We will return any over allowance.

We send only sound, freshly gathered plants, carefully packed in stout cartons.

We make no extra charges for packing.

We are experienced in packing and shipping to foreign countries.

OUR REFERENCES:

Laredo National Bank

Laredo Chamber of Commerce



FEROCACTUS LECONTEI—THE "FLAME BALL" CACTUS.

Has the most gorgeous rose colored spines of all species, attracting attention wherever displayed.

FOR DEALERS

Wholesale lists for quantity orders, also special assortments for combination bowls, miniature gardens and specimen exhibits. Requests for wholesale list should be written on dealer's letter head.

WE ARE MEMBERS

Cactus and Succulent Society of America.

Texas State Florists Association
Tijdschrift der Belgische
Cactustiefhebbers.

VISIT LAREDO

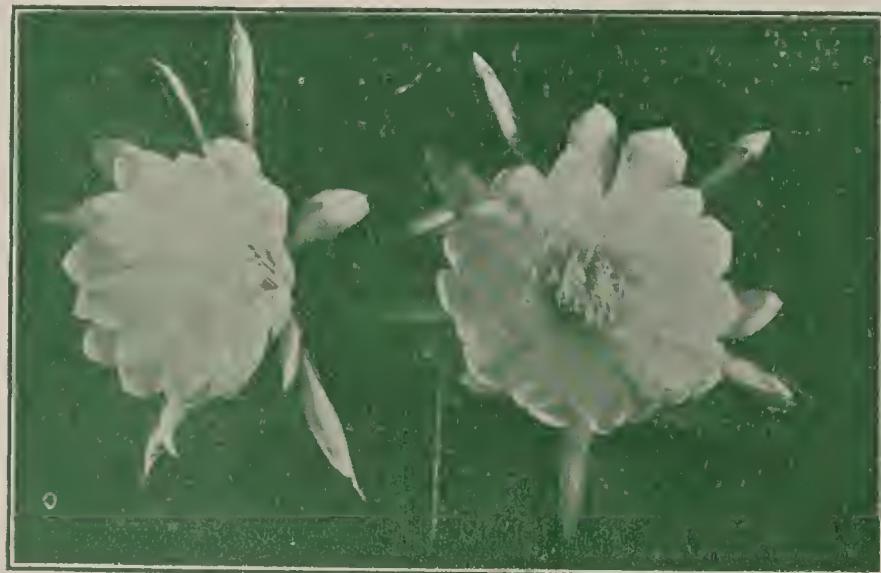
"THE GATEWAY TO MEXICO"

Take the Pan-American Highway at San Antonio, Texas, South 150 miles to Laredo, cross the border here and proceed to the interior—Monterrey, Saltillo, etc., for a most picturesque and enjoyable tour.

While in Laredo, be sure to visit the SHINER CACTUS NURSERY, located on the Heights at 2202 Market St. Directions are given at the leading Hotels, Tourist Camps and the Chamber of Commerce.



APOROCACTUS FLAGELLIFORMS
CRISTATA
GRAFTS



BLOOMS OF AN EPIPHYLLUM



Picture made in 1910. Collection of Peter Hoffmann, Florist. The majority of these plants are still living, a tribute to a student of cultural requirements and lover of the rare and unusual in plant life.